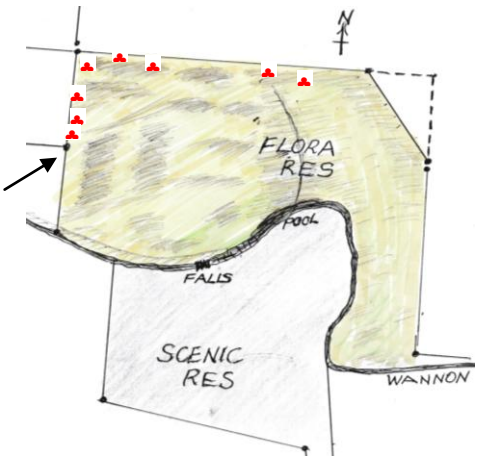
HFNC weed control report for Nigretta Flora Reserve 2024

Grazing on this Crown Land stopped in 1975. HFNC submissions to the LCC saw this 12 ha grassy woodland becoming a Flora Reserve in 1982. Our surveys have shown 206 native species present.

An aggressive invader, African Weed Orchid (AWO), was found in great numbers on this site in 2009 and action has been taken over the last 16 years to combat it, as well as other weeds (e.g. Phalaris, Bent Grass, Wild Gladioli *Gladiolus undulatus*, Carrot Weed *Fumaria capreolata* & Cleavers *Galium aparine* resulting from a history of grazing, dumping of garden rubbish and other incursions.

Saturday 26 Oct. RB, DL & RD spent 15 hrs wiping 430 AWO with glyphosate (30 mL/L), metsulfuron methyl (1 g/L), wetter and dye. Almost all of the reserve was covered. A mass of GA was spot-sprayed under Tree Violets on NE, mid-N, NW corner and mid-NW fence locations (the latter in bracken). Some phalaris and thistles were also sprayed – total spray applied was 9 L.

Fence condition – the fence is failing, with trees fallen over it at various places and leaning posts needing propping or replacing. We used some dead branches to prop the fence up at one point on the mid-north fence.



The fence in the lower part of the west fence has been knocked over and would allow sheep from that adjacent paddock (if it is actually stocked) to degrade this important small reserve. We noticed, from the presence of dung, that some sheep had been grazing in the northern central part of the reserve but there were none present on our visit.

Hamilton's rainfall (mm) for the winter-spring periods are given below. In 2024, except for 2023, the winter and spring periods were drier than usual.

Year	May	June	Jul.	Aug.	Sept.	Oct.	May-Aug	May-Oct.	Sept. + Oct.
2024	22	28	95	47	78	40	192	310	118
2023	53	101	51	30	28	40	235	303	68
2022	48	80	38	109	89	126	275	490	215
2021	53	61	97	64	49	65	275	389	114
2020	90	61	38	70	95	91	229	445	186
2019	79	94	68	64	61	36	305	402	97
Long-term*	54.3	66.7	71.5	76.3	66.9	57.1	269	393	124

* 1983-2024 from Hamilton Airport

Summary of works to control AWOs since 2009:

- 2024 – 430 AWO were wiped [15 hrs]
- 2023 – 835 AWO were wiped [30 hrs]
- 2022 – 4,720 AWO wiped (4,070 plants) or dug (650 plants) [55hr]
- 2021 – 2,945 AWO wiped (2,295 plants) or dug (650 plants) [59 hrs]
- 2020 – 11,300 AWO wiped (8,335 plants), dug (725 plants) or pulled (2,240 plants) [83 hr]
- 2019 – 7,370 AWO wiped (6,765 plants), dug (499 plants) or pulled (106 plants) [68 hr]
- 2018 – 3,480 AWO wiped (3,225 plants) or dug (255) [60 hr]
- 2017 – 5,190 AWO wiped (3,820 plants), dug (1,265 plants) or pulled (105 plants) [57 hr]
- 2016 – 16,100 AWO wiped (13,625 plants) or dug (2,480 plants) or pulled (2,665 plants) [93 hr]
- 2015 – 4,045 AWO wiped (3,215 plants) or dug (830 plants) over the entire site [46 hr]
- 2014 – 7,975 AWO wiped (6,665 plants) or dug (1,310 plants) over the entire site [65 hr]
- 2013 – 8,275 AWO wiped or dug (8,125 plants) or pulled to remove heads (150 plants) [71 hr]
- 2012 – 6,900 AWO wiped or dug (6,800 plants) or pulled to remove heads (100 plants) [46 hr]
- 2011 – 5,500 AWO wiped (5,000 plants) or pulled to remove heads (500 plants) [39 hr]
- 2010 – 13,720 AWO wiped (10,140 plants) or pulled (3,580 plants); NW & E not done [27 hr]
- 2009 – 22,500 AWO dug (2,290 plants) or pulled (20,280 plants) but NW area not done [68 hr]

We might speculate that the significant decline in AWO in 2024 & 2923 is due to climatic factors, in particular the drier winter and spring. Control of Cleavers by hoeing and spraying must continue, as this is likely to be a greater threat to the native flora.